

IN THE CLAIMS:

Claims 1-52 (cancelled)

Claim 53 (currently amended) ~~⌘~~ An aqueous dispersion comprising a plurality of water soluble beads dispersed in water, each of the water insoluble bead beads comprising droplets of an oil in water emulsion in a polymer matrix, wherein the polymer matrix comprises a crosslinked polymer, each of the water insoluble bead comprises beads comprising at least one volatile hydrophobic component, gelatin, a polysaccharide and water, each of the water insoluble bead beads being formed from the volatile hydrophobic component, the gelatin, the polysaccharide and water ~~by a process~~ such that the bead is storable in water without release of the volatile component and such that the volatile component is released from said water insoluble bead in atmospheric air.

Claims 54 and 55 (cancelled)

Claim 56 (currently amended) The ~~water insoluble bead dispersion~~ according to claim 53, wherein the polysaccharide is selected from the group consisting of sodium alginate, carraggenan, guar gum, locus bean gum, chitosan, pectin and carboxy methyl cellulose.

Claim 57 (cancelled)

Claim 58 (currently amended) The ~~water insoluble bead~~ according to claim 53, Wherein each of the water insoluble beads further comprises comprising a surface active agent

selected from the group consisting of ethoxylated sorbitan ester, alkyl ether, and a block copolymer.

Claim 59 (currently amended) The ~~water-insoluble bead~~ dispersion according to claim 53, wherein each of said ~~bead~~ beads is of a size between 0.5 micron and 1 mm.

Claim 60 (currently amended) The ~~water-insoluble bead~~ dispersion according to claim 53, wherein each of said ~~bead~~ beads is of a size between 5 and 80 microns.

Claim 61 (currently amended) The ~~water-insoluble bead~~ dispersion according to claim 53, wherein said volatile component is a material that has an effect on a living organism.

Claim 62 (currently amended) The ~~water-insoluble bead~~ dispersion according to claim 53, wherein said volatile component is a pheromone.

Claim 63 (currently amended) The ~~water-insoluble bead~~ dispersion according to claim 62, wherein said pheromone is selected from the group consisting of grandlure, muscalure, gossypure and disparlure.

Claim 64 (currently amended) The ~~water-insoluble bead~~ dispersion according to claim 53, wherein said volatile component is an essential oil.

Claim 65 (currently amended) The ~~water-insoluble bead~~ dispersion according to claim 53, wherein said volatile component is a pesticide.

Claim 66 (withdrawn/currently amended) The ~~water insoluble bead~~ dispersion according to claim 53, wherein said volatile component is an attractant.

Claim 67 (withdrawn/currently amended) The ~~water insoluble bead~~ dispersion according to claim 66, wherein said attractant is selected from the group consisting of eugenol, benzyl alcohol, leaf alcohols, aldehydes and acetates.

Claim 68 (withdrawn/currently amended) The ~~water insoluble bead~~ dispersion according to claim 53, wherein said volatile component is an attractant inhibitor.

Claim 69 (withdrawn/currently amended) The ~~water insoluble bead~~ dispersion according to claim 68, wherein said attractant inhibitor is selected from the group consisting of (Z)-9-tetradecenyl formate and (E,E)-10, 12-hexadecadienol.

Claim 70 (currently amended) The ~~water insoluble bead~~ dispersion according to claim 53, wherein said volatile component is present in each of the plurality of beads an amount of up to 50% wt/wt.

Claim 71 (currently amended) The ~~water insoluble bead~~ according to claim 53, wherein said volatile component is present in each of the plurality of beads an amount of up to 20% wt/wt.

Claim 72 (cancelled)

Claim 73 (currently amended) The ~~water-insoluble bead~~ dispersion according to claim 53, wherein said gelatin is a type B gelatin.

Claim 74 (withdrawn/currently amended) The ~~water-insoluble bead~~ dispersion according to claim 53, wherein said volatile component is eugenol.

Claim 75 (currently amended) The ~~water-insoluble bead~~ dispersion according to claim 53, wherein each of the plurality of beads further comprising comprises tannic acid in an amount effective to provide a release rate of the volatile component from said bead in atmospheric air that is slower than a release rate of the volatile component from the bead in atmospheric air without the tannic acid.

Claim 76 (currently amended) ~~A process for preparing a sustained-release dispersion of a plurality of water-insoluble beads~~ The dispersion according to claim 53 ~~for release of the volatile hydrophobic component therefrom in atmospheric air, , wherein the dispersion is prepared by a porcess comprising:~~

- a) preparing an oil/water emulsion by homogenizing the volatile hydrophobic component in water, using at least one surface active molecule which is the gelatin;
- b) mixing said emulsion with at least one water-soluble polymer which is the polysaccharide and optionally rehomogenizing the mixture;
- c) adding the emulsion prepared in step (b) in a dropwise manner into a gellant solution to form said water insoluble beads bead;
- d) recovering the water insoluble beads bead from the gellant solution; and
- e) storing the recovered beads bead in water, said process further comprising the step of

chemically cross-linking the polymer.

Claim 77 (cancelled)

Claim 78 (currently amended) ~~A process~~ The dispersion according to claim 76, further comprising the step of drying said beads ~~bead~~.

Claim 79 (currently amended) ~~A process~~ The dispersion according to claim 76, wherein said gellant solution is selected from the group consisting of an electrolyte solution and a multivalent ion solution.

Claim 80 (currently amended) ~~A process~~ The dispersion according to claim 76, wherein said volatile component is a bioactive material.

Claim 81 (currently amended) ~~A process~~ The dispersion according to claim 76, wherein said volatile component is a pheromone.

Claim 82 (currently amended) ~~A process~~ The dispersion according to claim 81, wherein said pheromone is selected from the group consisting of grandlure, muscalure, gossyplure and disparlure.

Claim 83 (withdrawn/currently amended) ~~A process~~ The dispersion according to claim 76, wherein said volatile component is an essential oil.

Claim 84 (withdrawn/currently amended) ~~A process~~ The dispersion according to claim 76, wherein said volatile component is a pesticide.

Claim 85 (withdrawn/currently amended) ~~A process~~ The dispersion according to claim 76 wherein said volatile component is an attractant.

Claim 86 (withdrawn/currently amended) ~~A process~~ The dispersion according to claim 85, wherein said attractant is selected from the group consisting of eugenol, benzyl alcohol, leaf alcohols, aldehydes and acetates.

Claim 87 (withdrawn/currently amended) ~~A process~~ The dispersion according to claim 76, wherein said volatile component is an attractant inhibitor.

Claim 88 (withdrawn/currently amended) ~~A process~~ The dispersion according to claim 87, wherein said attractant inhibitor is selected from the group consisting of (Z)-9-tetradecenyl formate and (E,E)-10, 12-hexadecadienol.

Claim 89 (currently amended) ~~A process~~ The dispersion according to claim 76, wherein said volatile component is present in each of the beads an amount of up to 50% wt./wt.

Claim 90 (currently amended) ~~A process~~ The dispersion according to claim 76, wherein said volatile component is present in each of the beads an amount of up to 20% wt./wt.

Claim 91 (cancelled)

Claim 92 (currently amended) ~~A process~~ The dispersion according to claim 76, wherein said gelatin is a type B gelatin.

Claim 93 (currently amended) ~~A process~~ The dispersion according to claim 76, wherein said gellant is an aqueous metal salt solution.

Claim 94 (currently amended) ~~A process~~ The dispersion according to claim 93, wherein said aqueous metal salt solution comprises a divalent or trivalent metal salt.

Claim 95 (currently amended) ~~A process~~ The dispersion according to claim 93, wherein said metal salt solution comprises chlorides and acetates of calcium, barium and copper.

Claim 96 (currently amended) ~~A process~~ The dispersion according to claim 76, wherein the emulsion of step (b) is sprayed into said gellant to form a micron-sized beads bead.

Claim 97 (cancelled)

Claim 98 (currently amended) ~~A process~~ The dispersion according to claim 97, wherein said polysaccharide is an alginate.

Claim 99 (currently amended) ~~A process~~ The dispersion according to claim 98, wherein said alginate is a water-soluble salt of alginic acid.

Claim 100 (currently amended) ~~A process~~ The dispersion according to claim 98, wherein

said alginate is a water-soluble salt of organic bases.

Claim 101 (currently amended) ~~A process~~ The dispersion according to claim 98, wherein said alginate is selected from the group consisting of sodium, potassium, magnesium, ammonium alginate and amines.

Claim 102 (currently amended) ~~A process~~ The dispersion according to claim 98, wherein said alginate is present in an amount of about between 0.1 and 5% wt./wt.

Claim 103 (currently amended) ~~A process~~ The dispersion according to claim 98, wherein said alginate is present in an amount of about between 1 and 1.5% wt./wt.

Claim 104 (cancelled)

Claim 105 (withdrawn) A method for the sustained release of a volatile material comprising the steps of:

- a) providing the water insoluble bead of claim 53; and
- b) exposing the water insoluble bead to atmospheric air to cause a sustained release of the volatile hydrophobic component.

Claim 106 (withdrawn) A method for treating a volatile material comprising the steps of:

- a) providing the water insoluble bead of claim 53; and
- b) storing the water insoluble bead in water to prevent release of the volatile material.



Claims 107 and 108 (cancelled)

Claim 109 (currently amended) ~~A~~ An aqueous dispersion comprising a plurality of water insoluble beads dispersed in water, each of the water insoluble ~~bead~~ beads comprising droplets of an oil in water emulsion in a polymer matrix, wherein the polymer matrix comprises a crosslinked polymer, each of the water insoluble ~~bead~~ beads ~~consists~~ consisting essentially of at least one volatile hydrophobic component, gelatin, an alginate and water, each of the water-insoluble ~~bead~~ beads being formed from the volatile hydrophobic component, the gelatin, the alginate and water ~~by a process~~ such that the bead is storable in water without release of the volatile component and such that the volatile component is released from said water insoluble bead in atmospheric air.

Claims 110 and 111 (cancelled)

Claim 112 (currently amended) The dispersion ~~water insoluble bead~~ according to claim 109 , wherein each of the water insoluble bead is formed from the volatile hydrophobic component, the gelatin, the alginate, and water ~~by a process~~ such that the volatile component is released from the water insoluble beads ~~bead~~ in atmospheric air over a period comprising a plurality of hours.

Claim 113 (currently amended) The ~~water insoluble bead~~ dispersion according to claim 109 , wherein the water insoluble bead is formed from the volatile hydrophobic component, the gelatin, the alginate, and water ~~by a process~~ such that the volatile

component is released from the water insoluble ~~bead~~ beads in atmospheric air over a period comprising a plurality of days.

Claim 114 (new). The dispersion according to claim 53, wherein the gelatin is crosslinked.